

QUARTERLY REPORT OF INJURY SURVEILLANCE AND RESEARCH WORK GROUP (GETAC) – NOVEMBER 2009

Respectfully submitted by Rohit Shenoi, MD

We conducted quality checks on the completeness of data in the Texas EMS and Trauma Registry. We did this by comparing all admissions due to injuries (based on ICD-9 codes) present in the Texas Hospital Inpatient Database (THCIC) with the Trauma Registry Data. All hospitals in Texas (except a few very small hospitals) are required by law to submit data on all inpatient admissions (> 24 hours) to the State. The quality checks were conducted under 4 headings.

1. Participation of Licensed Hospitals in Trauma Registry

Overall, this varied from 58.3% in 2004 to 50.2% in 2007. It was very variable by TSA. The large TSAs (E and Q) had 29.6% and 29.3 % participation. Undesignated hospitals had the worst data entry at 18%. Reporting for designated hospitals was 90%.

2. Completeness in Required Data Fields

Generally, hospital data elements were completely entered between 90-100% of the time. However for the pre-hospital data elements, this was complete in only 49-90% of the time.

3. Comparison of the Trauma Registry and the Texas Hospital Care Information Collection (THCIC) data for the top 5 causes of Injury Hospitalization

Motor Vehicle traffic related cases were closely matched between the two databases. However, there was a major undercounting for admissions due to falls in the Trauma Registry by a factor of 42%. Overall, the trauma registry undercounted trauma cases when compared to the THCIC database by a factor of 45%. For cases in which a cause of injury was specified, 30.7% of THCIC trauma cases did not contain a valid E-code, compared to 0.2% in the EMS/Trauma Registry. E codes describe the mechanism of injury and are required for injury surveillance.

4. Comparison of Top 5 causes of Hospitalization due to TBI

Regarding cases for which a cause of injury was specified, 38.8% of THCIC TBI cases did not contain a valid E-code, compared to 0.2% in the EMS/Trauma Registry. There was under-reporting by the Trauma Registry by a factor of 27%.

Suggestions:

1. We need to ensure that undesignated trauma hospitals enter Trauma Registry data.
2. All data fields should be filled.
3. Pre-Hospital data entry needs to be improved
4. Data reports should be produced periodically in a form useful to stakeholders and Trauma Service Areas.